

## Joining Producer Organizations as an Opportunity for Risk Management in Bulgarian Agriculture

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### Abstract

*The purpose of this article is to examine some indicators characterizing agricultural producer organizations in Bulgaria in the light of European measures to achieve a fairer food supply chain and, on this basis, to consider opportunities to promote the development of such structures in the country. The number of structures of this type established in Bulgaria sharply increases when the organizations have the opportunity to receive public support, which is not related to a requirement for financial participation of the farmers themselves in the implementation of their planned activities. The established organizations have a small number of members and realize a relatively low share of the production created in the relevant sector. Under these conditions, a political approach to support that part of producer organizations that help limit market risk is essential.*

*Keywords: risk management, agriculture, producer organizations, fair food supply, bargaining power*

*JEL Code: Q1*

### Introduction

Agriculture is a particularly risky business. The variation in yields during individual years results in price fluctuations, and the peculiarities of the price elasticity of demand and supply of agricultural products reinforce the effect of price volatility. The long-term changing climate contributes to the frequency of risky events in the sector - in recent years, weather events have been more extreme, the frequency of damage caused by pests and disease outbreaks has increased. All of these events cannot be controlled by farmers, but they have a direct impact on agribusiness returns and form the "new normal" to which agricultural producers must adapt. Changes in environmental conditions require a review of the role and importance of risk management within the overall agricultural management system. This includes rethinking the strategies adopted to limit the losses occurring as a result of risk events.

Farming in Bulgaria has traditionally been carried out in an open production system, where resources are bought and products sold by the producer at a price determined at the time of purchase. In the European Union, the application of open production in agriculture has decreased in recent years, due to the establishment of a practice of pre-negotiating the sale of agricultural products (so-called forward contracts). A forward contract, as an agreement between a farmer (or a group of farmers) and a buyer, is considered a risk management tool, as through it farmers can ensure secure realization of production, less volatility of producer prices and in some cases - even sure price. In order to make it possible to conclude such preliminary contracts for the sale of agricultural products, it is necessary to increase the contractual power of farmers in the country by creating business associations of producers. This is because prior agreement between large customers and a large number of relatively small farmers requires an intermediary - a pooling/cooperative structure - to provide the quantity of produce demanded by the customer with the required quality at a total transaction cost acceptable to the processor/trader. As part of European measures to achieve a fairer food supply chain, the European Union supports farmers who wish to work together in producer organizations in accordance with the general provisions of Regulation (EU) No 1308/2013, Delegated Regulation (EU) 2016/232. The support is implemented as, on the one hand, recognized producer organizations (POs) are exempted from certain

prohibitions in the field of competition, and on the other hand, established producer associations have the opportunity to receive financial support under the two pillars of the Common Agricultural Policy. These organizations are expected to increase the bargaining power of farmers.

The purpose of this article is to examine some indicators characterizing producer organizations in Bulgaria in the light of European measures to achieve a fairer food supply chain and, on this basis, to consider opportunities to promote the development of such structures in the country.

### **1. Using European measures to achieve a fairer food supply chain to support farmers' initiatives to manage market risk**

It is expected that the development of producers' organizations will lead to an increase in the contractual power of farmers based on the concentration of the products they provide and hence - to a fairer distribution of added value and a reduction in the volatility of producer prices.

As of 2020, the majority (over 91%) of producer organizations in Bulgaria were recognized after 2015 (Fig. 1).

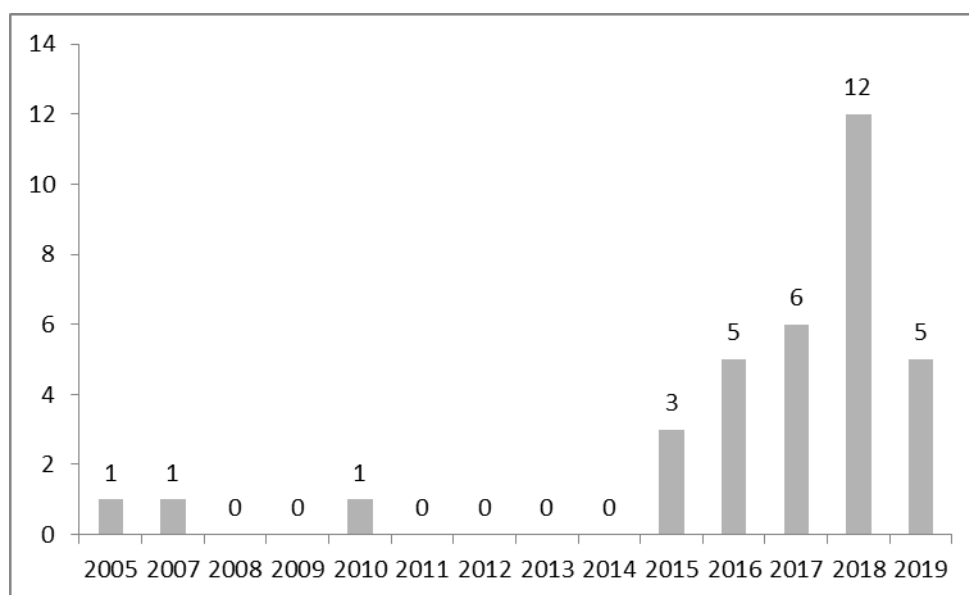


Figure 1. Number of producer organizations by year of recognition, 2005-2019.

Source: MAFF, Producer groups and organizations recognized by the Minister of Agriculture, Food and Forestry (<https://www.mzh.government.bg>)

Among the possible reasons for this is the lowering of the criteria for recognition of these structures (from a minimum of 7 members and BGN 195,583 turnover in the period 2007 - 2015 to a minimum of 6 members and BGN 50,000 worth of marketed production after 2015). In addition, within the period - 2018 and 2019, after the announcement of the first admission under measure 9 of the PRDP "Establishment of groups and organizations of producers", the number of recognized business associations of this type in the country increased twice - from 17 to 34 organizations (Fig. 1). This financial support does not require the financial participation of farmers in the planned activities, in contrast to the assistance provided before 2018 by the European Agricultural Guarantee Fund (EAGF) for organizations of producers from the "Fruits and vegetables" sector that develop operational programs.

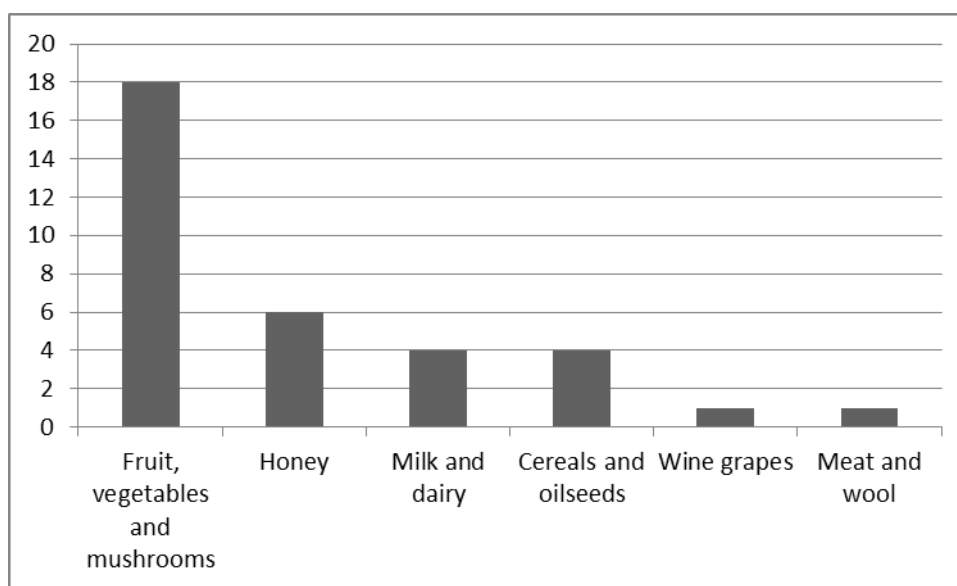


Figure 2. Number of producer organizations by sector of agricultural production, 2005-2019

Source: MAFF, Producer groups and organizations recognized by the Minister of Agriculture, Food and Forestry (<https://www.mzh.government.bg>)

More than half of them operate in the "Fruits and vegetables" sector. The share of organizations of bee products producers is relatively high (18%), followed by the equally represented in the total number of organizations operating in the milk and milk products (12%) and cereal and oilseeds (12%) sectors.

The list of recognized organizations published on the website of the Ministry of Agriculture, Food and Forestry also notes that by the end of 2020, most producer organizations are limited liability companies, except for two that are registered under the Cooperatives Act.

Bulgaria is part of the smaller group of European Union member states (eight countries) in which there is no functioning organization of agricultural producers, including more than 100 members (EC, 2019, p. 48). Within this group (Table 1), Bulgaria is one of the countries with the largest number of recognized producer organizations. Most of the countries in this group have practices of pre-negotiating prices between farmers and other actors in the value chain (only Bulgaria, the Czech Republic and Slovakia are exceptions) (EC, 2017, p.169). Along with their relatively large number, the producer organizations operating in Bulgaria are distinguished by the smallest average number of members - 8, which is quite close to the minimum required for recognition of such an association in the country (6 members) and relatively low share of the realized production from the one created in the relevant sector. Furthermore, within the considered group of countries, organizations of producers outside the "Fruits and vegetables" sector function only in Bulgaria and the Czech Republic (Table 1).

Table 1. Number of organisations, total and average number of members and degree of organisation, of agricultural producer organizations in selected Member States by agricultural sector, 2017

Country	Sector	Number of recognized producer organizations	Total number of members	Average number of members	Relative share of production realized by producer organizations in the total value of production in the sector. (%)
Bulgaria	Fruits and vegetables (F&V)	11	89 (8)	11	8,5
	Milk	2	23	12	1
	Cereal and oil crops	3	12	4	0,42
	Honey	2	11	6	1
	Wine	1	10	10	0,37
	Country total	19	145	8	
Czech Republic	F&V	22	204	9	37
	Milk	19	870	46	64
	Beef and veal	1	9	9	0,01
	Eggs	1	4	4	11
	Swine	1	10	10	n.a.
	Oil seeds	1	12	12	n.a.
	Country total	45	110	25	
Denmark	F&V	2	107	54	23
	Country total	2	107	54	23
Finland	F&V	4	205	51	2
	Country total	4	205	51	2
Ireland	F&V	2	53	27	66
	Total	2	53	27	66
Latvia	F&V	5	34 (3)	11	33
	Country total	5	34 (3)	11	33
Sweden	F&V	5	262	52	31
	Country total	5	262	52	31
Slovakia	F&V	5	44	9	18
	Country total	5	44	9	18

Source: Own elaboration based on data from EC, 2019

A comparison between the share of holdings participating in producer organizations in the "Fruits and vegetables" sector and the share of their marketed production in the Member States in which all established organizations include less than 100 members in 2017 is presented in Table 2.

Table 2. Share of marketed production (%) and share of agricultural holdings (%) in fruit and vegetable producer organizations in selected European Union member states, 2017

Country	Share of production marketed by PO in the total value of production in the sector (%)	Share of members of producer organizations in the total number of agricultural holdings in the sector (%)
Bulgaria	8,5	0,47
Czech	37	16
Denmark	23	18
Finland	2	9
Ireland	66	29
Latvia	33	1
Sweden	31	24
Slovakia	18	11

Source: Own elaboration based on Eurostat data (online code: ef\_m\_farmleg ) and EC, 2019

In almost all member states, the share of producer holdings united in organizations is smaller than the share of their realized production, i.e. producers cooperating in such structures are larger (with higher resource status) and/or collectively more productive than organizations that do not cooperate.

Financial support measures to improve cooperation between producers are part of a wider program that aims to achieve a more efficient and fairer food supply chain and includes two more groups of measures (EC, 2019, p. 5) with the potential to influence the development of business associations of producers, namely - legal changes aimed at increasing market transparency (EC, 2022) and new regulations on unfair commercial practices (EU Directive 2019/633). The new Unfair Trading Practices Directive prohibits certain acts of anti-competitive behavior by operators in the food supply chain with greater bargaining power. Among the prohibited practices are payments later than the deadline specified in the directive, unilateral changes to the contract by the buyer, payments that are not related to a specific operation, as well as transferring the risk of loss and deterioration of quality to the supplier.

At the end of 2019, the Commission took measures to improve market transparency in the food supply chain. The Regulation that introduces them (Commission Implementing Regulation (EU) 2019/1746, 2019) takes into account the fact that while the Union provides relatively rich publicly available information on producer sales prices and consumer prices, information on the prices of other participants in the supply chain of agricultural products and food is limited. The new measures aim to address these gaps by expanding the scope of price reporting. For the monitoring of price transmission along the chain, it is envisaged to collect price data from different economic entities (wholesalers, economic entities in the food industry and retailers). These new data complement the Food Price Monitoring Tool created by Eurostat (Eurostat, 2021) and the monthly data collected by the European Commission on the production, trade and prices of some products

(including milk, meat, field crops, fruit and vegetables, wine ), distributed to support better understanding of market signals and dealing with price volatility through the so-called market observatories (European Commission n.d, a). The new measures to improve market transparency have been taken for several sectors, including meat, eggs, dairy, fruit and vegetables and arable crops. The change refers to a requirement for weekly provision of additional price information based on existing data collection systems and procedures. Improving the transparency of the market is perceived at the political level as a way to form more realistic market expectations and thus - to reduce market risk for agricultural producers and their business associations. EU countries report the data to the Commission, which makes the information available on its agri-food data portal (European Commission n.d, b) and EU market observatories (European Commission n.d, a). Along with these initiatives to increase the transparency of the market, the information published by government organizations in Bulgaria about the prices of wholesalers and processors operating in the food industry is limited. The available data are mainly limited to producer prices and agricultural product price indices (annual and quarterly data of the National Statistical Institute) and weekly data on retail prices of basic food products in large retail chains and other commercial establishments published by the System for Agricultural Market Information (SAPI) and the MAFF website (MAFF n.d.). The published weekly data on wholesale prices of basic food products are provided mainly by the State Commission on Commodity Exchanges and Markets (for puffed Flour type 500, eggs, sunflower oil and frozen chicken meat) and for a more limited number of products - fresh chilled chicken and lamb - from SAPI (SAPI, n.d.).

## **2. Opportunities to promote the development of producer organizations in Bulgaria**

The capacity of public institutions to provide support during this initial building period is a critical factor (IFPRI, 2012) for the success of producer organizations. Among the opportunities to promote the development of these economic structures are the following:

First, it is possible to revise the requirements for the minimum number of members, as well as the limit for the minimum value of the offered production, under which a producer organization can be established. The observed practice in the country shows that with higher restrictions (minimum 7 farmers and BGN 195,583 turnover), the associative activity of farmers in producer organizations is relatively weak. On the other hand, although after the lowering of these requirements in 2015, the number of recognized producer organizations is increasing, their economic strength does not allow one of the main objectives of the support to be realized, namely - increasing the bargaining power of farmers - Bulgaria is one of the few Member States where farmers do not use forward contracts to limit the market risk they face. It should also be borne in mind that in the initial stage of formation of cooperative structures, with the increase in the number of members, the risk of lowering the sustainability and integrity of the organizations increases due to the likelihood of conflicts of interests, conflicts and loss of trust. For this reason, it is accepted in the literature (Buckley, 2007) that in order to facilitate good communication and regular interactions between all member farms, the size of the group should be kept within certain limits - ideally between 15 and 30 members. When determining the limits, it is useful to take into account the possibility that at a certain future point relatively small and sustainable producer organizations will unite in associations of producer organizations and thus increase their influence on the market.

Second, it is necessary to carry out regular assessments of the impact of financial support on the long-term viability of producer organizations and groups in order to avoid inefficient spending of public funds. Tracking the changes in the number of established producer organizations shows that in periods of financial support for the creation of farmers' associations, there is a serious increase (more than two times) in the number of recognized producer organizations, when the support does not require financial participation of farmers in the planned activities. It is important to identify the conditions under which support leads to undesirable cooperation in order to serve the interests of individual farms.

Third, a future study of possible effects of increasing the upper limit of the voting share (respectively - the capital share) of one member of a producer organization on the share of output produced by these associations would be useful.

Most of the producers' organizations in the country are limited liability companies. This means that, in general, the members of these organizations prefer a legal organizational form in which the share in the capital has an impact on the formation of the weight of votes in decision-making (Ordinance No. 12/2015, Ordinance No. 11/2007). Along with this, in the conditions for the recognition of producer organizations in Bulgaria, requirements are formulated that each member, as well as the related persons together, hold no more than 40% of the votes and shares (Regulation No. 11/2007, Art. 3) and each member to hold no more than 40% of the voting rights (Ord. No. 1/2015, Art. 12; Ord. No. 12/2015, Art. 3). Commission Regulation (EU) 2017/891, Art. 17 enables the maximum percentage for voting rights and shares or capital to be increased to 49%. It is useful to study to what extent a possible increase in the upper limit of the shares in the votes (respectively - shares in the capital) would motivate relatively large organizations to cooperate with smaller structures. This can contribute to the diffusion of innovations and the spread of good practices among smaller and less productive farms and thus - to an increase in the share of marketed production by producer organizations.

Fourth, taking measures to increase market transparency would be beneficial. In order for these organizations to help limit the uncertainty accompanying agricultural production, it is necessary for the organizations that build them to transform from mostly dependent market participants to equal partners, negotiating prices, quality, delivery time and other terms of transactions with processors and traders. Having timely and easily accessible information on the specific supply, demand and prices of individual markets in the country's food supply chain is key to forming realistic market expectations, facilitating target market selection and negotiating prices and delivery terms. SAPI Ltd. - a state-owned company with the main activity of collecting, processing and providing market price information - monitors weekly the prices of 900 products along the entire food chain by regions of the country (SAPI, n.d.) and there is no other functioning similar system in Bulgaria. It is appropriate to carry out a study of the need and possibilities to expand the published data that farmers and their organizations have access to. The specific content and form of the published information should correspond, on the one hand, to identified current needs, and on the other hand, to the results of an assessment of the capacity of producers and their associations to process market information. It is also useful to monitor the balance between the marginal utility of additional data for farmers and their associations and the public costs associated with providing this information. The publication of weekly data on purchase prices and requirements of different groups of industrial users can reduce market risk to these farmers' associations. The example of the U.S. Market Information Units (part of the U.S. Department of Agriculture's Agricultural Product Marketing Service), whose mission is to provide the agricultural industry with accurate and unbiased marketing information reflecting current market conditions (U.S. Department of Agriculture n.d.). Since 1999, a mandatory price reporting mechanism has been introduced into this system in order to provide all market participants, both large and small, with similar levels of market transparency. Some groups of processors above a certain size threshold are required to electronically report the price of each transaction, along with the agreed quantity and other terms (some quality characteristics of the product and destination) that are used to produce market reports. After initial reluctance, market participants generally support the system, rate market reports as timely and meaningful, and studies rate market efficiency as increased (Report of the Agricultural Markets Task Force, 2016, p. 17).

Fifth, support for the development of social and human capital would be beneficial. Producer organizations in the country are structures at an initial stage of development. Among the possible initiatives for building trust on the one hand between farmers and on the other hand - in the new united organizations created by them, are assistance in popularizing (for example through the

website of the MAFF) discussion forums to promote the exchange of ideas between farmers who have an interest in association with a business purpose; support of campaigns to popularize the activities of established producer organizations; studies to identify groups of customers who prefer local products and the conditions on which their propensity to build long-term partnerships with local producer associations depends; organizing meetings between representatives of producer organizations and potential industrial users, as well as providing methodological support in generating ideas for the development of unique product offers aimed at the retail market (for example, based on a unique territorial identity of producer organizations). Along with typical management skills, the sustainable management of a cooperative organization also implies somewhat specific qualities such as trust and instilling confidence in the idea of cooperation; commitment to common goals of a group of producers; skills for quick analysis of interests that underlie loss of support from participants in the organization; identifying obstacles related to recruiting new members; effective management of controversies that may undermine the integrity of the organization, as well as skills to defend the objectives of the organization/group in front of counterparties and representatives of the public authority. Due to these specificities, as a rule (Millns et. al, 2006)) producer organizations in agriculture face a lack of key managerial skills to achieve sustainability in the first years of their development. In addition to training support (funded under Pillar 2 of the CAP), the development of the European Union Risk Management Platform, which should provide a forum for farmers, public authorities and stakeholders, can be beneficial for adopting new practices to limit uncertainty countries to exchange experiences and best practices (EU, 2018). In this way, some risk management strategies and techniques that are already effective in other Member States may become more widely known among agricultural producers in Bulgaria and their organizations.

Sixth, methodological support for self-assessment of the potential for success of the idea of creating a producer organization can be useful. Providing access to self-assessment questionnaires can be helpful in overcoming farmer subjectivity (if any) in assessing the potential for success of a cooperative organization. Table 3 presents a sample questionnaire, which is based on the assumption that the chances of success of a farmer-created organization depend mainly on the degree of clarity of the joint business idea (including the purpose of the structure, activities, resources and sources of resources for implementation of the goal), the motivation for joint business, the sense of ownership of the created organization, the initiative of the future members, the trust between them, their experience in jointly solving business problems and the frequency of contacts between them (Penrose-Buckley 2007)). It is assumed that as the number of true statements increases, so does the potential for success of the organization being created.

Table 3. Questions to generally assess the potential for success of a business association idea

Factors determining the potential for success	Questions to assess the success potential of the idea
Clear idea	<ul style="list-style-type: none"> <li>• The producers are aware of the organizational goal</li> <li>• The producers have agreed among themselves the activities through which this goal will be achieved</li> <li>• Producers have identified the resources (personnel, infrastructure, equipment, financial resources) that will be required</li> <li>• Producers have identified the possible sources of resources</li> </ul>
Motivation to do joint business	<ul style="list-style-type: none"> <li>• Each member's joining the organization is motivated more by a desire to jointly solve problems and address constraints than by</li> </ul>



	<p>opportunities to access public funding.</p> <ul style="list-style-type: none"> <li>• Each of the producers can provide a clear explanation of why collective action is necessary and how cooperation will improve the results of their participation in the market.</li> <li>• The problems that all participating producers want to overcome through collective action are similar.</li> </ul>
A sense of ownership (of the organization being created)	<ul style="list-style-type: none"> <li>• Producers see public assistance as supporting their efforts to solve the problems they face and do not expect it to solve the problems for them.</li> <li>• Producers talk about the idea of creating an organization as their idea and perceive the organization being created as their organization, not as an idea and venture initiated by external actors.</li> <li>• Producers would willingly invest their own resources - time, assets and financial means - even if there is no possibility of public support for the structure being created.</li> </ul>
Initiative	<ul style="list-style-type: none"> <li>• Most of the prospective members of the organization are members of at least one non-profit producer association and/or have taken the initiative to solve economic problems together with other farmers.</li> <li>• Prospective members of the organization have already taken steps to solve problems together (regardless of whether the initiative was successful).</li> </ul>
Social capital	<ul style="list-style-type: none"> <li>• Producers have already formed an informal organization and are working together.</li> <li>• All future members of the organization know each other.</li> <li>• All future members of the organization live or work in the same area.</li> </ul>

Adapted from Chris Penrose-Buckley (2007) *Producer Organisations. A Guide to Developing Collective Rural Enterprises*. Oxfam GB, p.160

### **Conclusion**

In conclusion, the cooperation of producers for joint economic activity is a novelty for Bulgarian agriculture. The number of established structures of this type increases sharply when the organizations have the opportunity to receive public support, which is not related to a requirement for financial participation of the farmers themselves in the implementation of their planned activities. Producer organizations with a small number of members have been established in the country in a relatively large number of sectors, and these associations realize a relatively low share of the production created in the respective sector. Under this combination of circumstances, the economic strength of these newly created structures does not allow one of the main objectives of the support to be realized, namely: increasing the bargaining power of farmers - Bulgaria is one of the few member states where farmers do not use contracts to limit the market risk they face. Under these conditions, the political approach to supporting producer organizations in Bulgaria is important, insofar as government measures can encourage and guide private risk management initiatives. Among the possible guidelines for promoting the development of risk-limiting business associations of producers are the following: revision of the requirements for the minimum number of members, as well as the limit for the minimum value of the offered production, at which a producer organization can be established; taking measures to prevent unwanted cooperation, which

aims to attract public funds to serve the interests of individual farms instead of achieving economic benefits and reducing risk as a result of joint economic activity; creating conditions for the formation of more realistic market expectations of business associations by increasing market transparency, as well as providing support for the development of human capital and the potential of farmers to work in cooperative structures to achieve shared goals.

### References

1. EC, Directorate-General for Agriculture and Rural Development (2019) Study of the best ways for producer organisations to be formed, carry out their activities and be supported, Final report
2. EC, Directorate-General for Agriculture and Rural Development (2019) Study of the best ways for producer organisations to be formed, carry out their activities and be supported. Annexes May 2019
3. EC, Directorate-General for Agriculture and Rural Development (2017) Study on risk management in EU Agriculture Final Report
4. EC (2022) Unfair trading practices in the food chain. [Online] Available from: [https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/market-measures/agri-food-supply-chain/unfair-trading-practices\\_bg](https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/market-measures/agri-food-supply-chain/unfair-trading-practices_bg) [Accessed 07/08/2022].
5. Directive (EU) 2019/633 of the European Parliament and of the Council of 17 April 2019 on unfair trading practices in business-to-business relationships in the agricultural and food supply chain
6. Commission Implementing Regulation (EU) 2019/1746 of 1 October 2019
7. Eurostat (2021) Food price monitoring tool. [Online] Online data code: PRC\_FSC\_IDX
8. European Commission n.d. (a) Agriculture and rural development. Market observatories [Online] Available from: [https://agriculture.ec.europa.eu/data-and-analysis/markets/overviews/market-observatories\\_en](https://agriculture.ec.europa.eu/data-and-analysis/markets/overviews/market-observatories_en) [Accessed 20/12/2022].
9. European Commission n.d. (b) Agri-food data portal. [Online] Available from: <https://agridata.ec.europa.eu/extensions/DataPortal/home.html> [Accessed 20/12/2022].
10. MAFF n.d. Statistika. Ikonomicheski analizi. Sedmichni cenovi analizi za osnovni hranitelni produkti. [Online] Available from: <https://www.mzh.government.bg> [Accessed 20/12/2022].
11. Agricultural Market Information System (SAPI Ltd) n.d. [Online] Available from: <https://sapi.bg/> [Accessed 20/12/2022].
12. IFPRI (2012) *The Role of Rural Producer Organizations for Agricultural Service Provision in Fragile States*, Discussion Paper 01235
13. Buckley, C. (2007) *Producer Organisations A Guide to Developing Collective Rural Enterprises*. Oxfam GB
14. US Department of Agriculture. Agricultural Marketing Service [Online] Available from: <https://www.ams.usda.gov/rules-regulations/mmr> [Accessed 20/12/2022]
15. Report of the Agricultural Markets Task Force (2016) *Enhancing the Position of Farmers in the Supply Chain*, Brussels, November 2016
16. Millns, J., Juhasz, J. (2006) *Promoting farmer entrepreneurship through producer organizations in Central and Eastern Europe*, FAO, Rome
17. EC (2018) EU Budget: the Common Agricultural Policy beyond 2020 [Online] Available from: [https://ec.europa.eu/commission/presscorner/detail/en/MEMO\\_18\\_3974](https://ec.europa.eu/commission/presscorner/detail/en/MEMO_18_3974) [Accessed 20/12/2022]